

# SUMMARY

## S-1 INTRODUCTION

The Trinity Parkway is a proposed new toll road located in the City of Dallas, Dallas County, Texas (TxDOT Control-Section-Job (CSJ) Number 0918-45-121). The Trinity Parkway would provide a reliever route generally to the west of downtown Dallas, connecting from the IH-35E/SH-183 interchange (northern terminus) to the US-175/SH-310 interchange (southern terminus), a distance of approximately 9 miles. The FHWA (lead agency), NTTA, TxDOT, and the City of Dallas are project sponsors. The USEPA and the USACE are cooperating agencies for the project.

The EIS for the Trinity Parkway is being prepared pursuant to NEPA and in compliance with the NEPA regulations issued by the CEQ and the FHWA. The NEPA regulations are a mandate for federal agencies to examine the potential environmental consequences of their proposals, consult with other agencies, document the analysis, and make the information available to the public prior to making a decision. An EIS presents detailed socioeconomic, environmental, and engineering information about a project so that the general public and federal, state, and local agencies can appropriately review and comment on it.

Completion of the environmental review and impact documentation process of this FEIS, followed by an anticipated ROD by the FHWA, would permit the proposed action to proceed to the final design phase unless the No-Build Alternative is selected.

## S-2 THE RELATIONSHIP OF THE TRINITY PARKWAY FEIS TO PREVIOUS DOCUMENTS

On January 28, 2005, the FHWA approved the Trinity Parkway DEIS for public release, and the DEIS was subsequently released for public review in February 2005. On March 29, 2005, a public hearing for the Trinity Parkway DEIS was held at the Dallas Convention Center Arena. On April 8, 2005, the public comment period for the DEIS concluded.

On November 17, 2005, the FHWA, in consultation with the USACE, agreed to publish a SDEIS for the Trinity Parkway (see **FEIS Section 1.6.2**). On February 19, 2009, the FHWA approved the Trinity Parkway SDEIS for public release. On May 5, 2009, a public hearing for the Trinity Parkway SDEIS was held at the Dallas Convention Center Arena. The extended comment period began on March 20 and continued through June 30, 2009.

In 2009, subsequent to the publication of the SDEIS, the southbound IH-45 to southbound US-175 direct connect (DC) ramp and the northbound US-175 to northbound IH-45 DC ramp, which were originally proposed to be constructed as part of the Trinity Parkway, were instead incorporated into the Phase I portion of the SM Wright Project being advanced separately by TxDOT. The SM Wright Project is an independent project with its own logical termini, but dovetails the proposed Trinity Parkway project near its southern project terminus (US-175/SH-310). On December 18, 2012, the FHWA approved the SM Wright Project Environmental Assessment (EA) for public release (CSJs: 0092-01-052, 0197-02-108 and 0092-14-081). Public hearings for the SM Wright Project were held on January 31, 2013 and June 27, 2013. The SM Wright Project EA was prepared during the Metropolitan Transportation Plan (MTP) transition period between *Mobility 2035* and *Mobility 2035: The Metropolitan Transportation Plan for North Central Texas, 2013 Update* (hereinafter '*Mobility 2035 – 2013 Update*'); therefore, a consistency report was prepared that determined that the SM Wright Project EA was consistent with the *Mobility 2035 – 2013 Update*. On September 13, 2013, the FHWA determined that the SM Wright Project had completed all requirements under NEPA, and the project is proceeding with final project design. The removal of SM Wright Project ramps from the Trinity Parkway and the associated changes in impacts to the environment are reflected in the discussion and analysis presented in this FEIS.

On April 1, 2009, the USACE released the *Periodic Inspection Report, Dallas Floodway, Trinity River, Dallas, Dallas County, Texas* (Report No. 9) which cited deficiencies in the Dallas Floodway levee system, including segments adjacent to Trinity Parkway Build Alternatives. Because the SDEIS was released prior to the USACE inspection report, it did not include a discussion of the reported deficiencies and any impacts that these may have on the Trinity Parkway Build Alternatives. However, the inspection report was acknowledged during the May 5, 2009, public hearing on the SDEIS. Subsequently, the FHWA, TxDOT, and the NTTA stated their intent to further evaluate the levee deficiencies and a future levee remediation plan being developed by the City of Dallas and the USACE as it relates to the Trinity Parkway. This further analysis of levee deficiencies and remediation, along with an enhanced evaluation on the practicability of the Trinity Parkway alternatives in accordance with EO 11988 (Floodplain Management) and EO 11990 (Protection of Wetlands) and an update on activities performed in compliance with Section 106 of the NHPA, were completed as part of a LSS to the SDEIS.

On March 7, 2012, the FHWA approved the Trinity Parkway LSS to the SDEIS for public release. On May 8, 2012, a public hearing for the Trinity Parkway LSS was held at the Dallas Convention Center Arena. The public comment period for the LSS concluded on May 18, 2012.

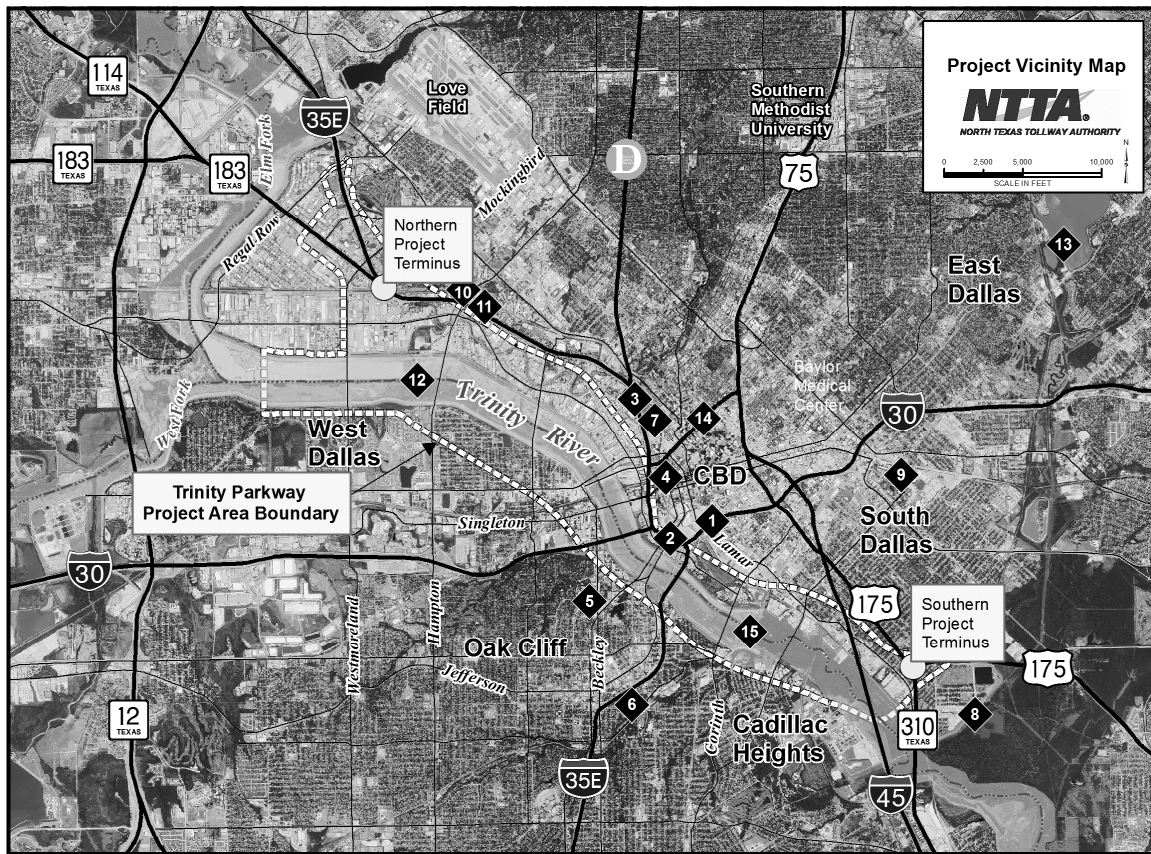
In March 2013, project partners agreed on the expansion of the Trinity Parkway project area to the north by approximately 0.5 mile along IH-35E (Lower Stemmons Freeway) and SH-183. The expansion of the project area was needed to accommodate the deferral of the IH-35E at SH-183 portion of Project Pegasus from the current financially-constrained MTP, *Mobility 2035 – 2013 Update* (NCTCOG, 2013). Environmental approval for Project Pegasus was obtained in July 2005 but the deferral of the project from the MTP due to lack of funding will likely result in its completion after the Trinity Parkway, assuming that it is reactivated in some form. Accordingly, modifications to project design were necessary to ensure the functional transition of the Trinity Parkway onto IH-35E and SH-183. These design modifications and the associated changes in impacts to the environment are reflected in the discussion and analysis presented in this FEIS.

### **S-3 PROJECT DESCRIPTION**

The NTTA proposes to design, construct, operate, and maintain a limited-access toll facility in the City of Dallas extending from the IH-35E/SH-183 interchange (northern terminus) to the US-175/SH-310 interchange (southern terminus), a distance of approximately 9 miles. The proposed project, known as the Trinity Parkway, would provide a needed reliever route for Lower Stemmons, Mixmaster, and the Canyon and would be generally located west of the existing freeway loop that encircles downtown Dallas (see **Figure S-1**).

The project area includes the Dallas Floodway, a federal flood conveyance and levee system carrying the main stem drainage flows of the Trinity River. As previously mentioned, the northern project area boundary along IH-35E (Lower Stemmons Freeway) and SH-183 was extended approximately 0.5 mile north from that originally presented in the DEIS, SDEIS, and LSS documents. The expansion of the project area was necessary to accommodate the transition of the Trinity Parkway onto IH-35E (Lower Stemmons Freeway) and SH-183. Additional discussion related to this project area expansion is presented in **FEIS Sections 1.1.2** and **2.9.1.1**.

**FIGURE S-1. PROJECT VICINITY MAP**



**Places of Interest**

- |                               |                              |                               |
|-------------------------------|------------------------------|-------------------------------|
| 1 - Canyon (IH-30)            | 6 - Dallas Zoo               | 11 - Dallas Market Center     |
| 2 - Mixmaster (IH-35E/IH-30)  | 7 - American Airlines Center | 12 - Dallas Floodway          |
| 3 - Lower Stemmons (IH-35E)   | 8 - Rochester Park           | 13 - White Rock Lake          |
| 4 - West End and Dealey Plaza | 9 - Fair Park                | 14 - Woodall Rodgers Freeway  |
| 5 - Methodist Medical Center  | 10 - Parkland Hospital       | 15 - DART Rail River Crossing |

The proposed facility would ultimately consist of six mixed-flow tolled mainlanes, local street interchanges, and tollway-to-freeway interchanges at the northern terminus, southern terminus, Woodall Rodgers Freeway, and IH-45 (see **FEIS Chapter 2**). Additional interchange connections are included, but vary between each of the Build Alternatives under consideration. Funding for the proposed project is anticipated to be provided by local, state, and federal sources, and through the collection of tolls. The design features for the four Build Alternatives considered are discussed in **FEIS Chapter 2**.

As presented in this FEIS, the logical termini for the purpose of evaluating alternatives and impacts of the proposed improvements are the junctions at IH-35E/SH-183 and US-175/SH-310. The proposed action has independent utility and would not preclude other foreseeable transportation improvements.

Various municipalities and agencies such as the NCTCOG, TxDOT, Dallas Area Rapid Transit (DART), Dallas County, and the City of Dallas have demonstrated long-term support for the project. The proposed project is included as part of a regional freeway/tollway plan in *Mobility 2035 – 2013 Update* (NCTCOG, 2013), which is the regional MTP covering all modes of transportation and transportation system improvements. The inclusion of the Trinity Parkway in *Mobility 2035 – 2013 Update* indicates regional governmental support. Additional discussion relating to the historical background of the MTP and its relationship with the proposed project is included within **FEIS Section 1.6.1.1**.

#### **S-4 NEED AND PURPOSE FOR ACTION**

**FEIS Chapter 1** describes the need and purpose for the proposed action. The transportation needs in the Trinity Parkway project area are summarized below:

- There is insufficient transportation capacity (e.g., freeway lanes, city streets, transit) in the Lower Stemmons/Canyon/Mixmaster area near downtown Dallas to carry trips flowing north-south (generally along IH-35E) and east-west (generally along IH-30). This is most evident in the morning and evening rush hours on weekdays, with the heaviest traffic flowing northbound and westbound in the morning hours, and southbound and eastbound in the evening hours.
- The traffic problems in the Canyon and Mixmaster are intensified by the layout of mainlanes, service roads, ramps, and surface streets in the area which fail to properly provide for the routes and destinations of the traveling public. Secondary problems include forced lane changes; abrupt and unexpected merges, weaves, and exits; missing connections for direct freeway-to-freeway movements; high accident rates; and poor access for emergency response vehicles.

The existing transportation problems in the corridor are the result of various urban influences, including high population growth, increased suburbanization, changing employment patterns, trade-related transportation, lack of alternative routes, and high use of single-occupant vehicles. These influences, discussed further in **FEIS Section 1.3.2**, result in many effects, including slow travel speeds, extended hours of congestion, accidents, reduced air quality due to congestion, and poor attraction of businesses to adjacent areas. Population and economic growth projections for the region indicate that corridor congestion problems would continue to worsen unless action is taken.

Congestion in the Trinity Parkway Corridor also slows travel for many miles along freeways feeding into the Dallas Central Business District (CBD) center, such as IH-35E (Lower Stemmons and South R.L. Thornton Freeways), IH-30 (Tom Landry Freeway and East R.L. Thornton Freeway), SH-183 (Airport Freeway), SH-114, and IH-45. In fact, segments of IH-35E (Lower Stemmons portion - from SH-183 to the Jefferson Street Viaduct), IH-30 (through the Canyon area), and IH-35E (from US-67 to the Jefferson Street Viaduct) all leading into the CBD were ranked in the top 25 of TxDOT's top 100 congested roadway segments in the State of Texas for 2013 (see additional discussion in **FEIS Section 1.3.4.3**). Proposals for improving outlying segments of these freeways would not be entirely effective until traffic capacity is increased in and around the downtown area.

The primary purpose for the Trinity Parkway is to manage congestion on existing highways through the downtown Dallas area by creating a tollway that would effectively bypass the CBD. The proposed Trinity Parkway reliever route would help manage congestion on IH-35E (Lower Stemmons and South R.L. Thornton Freeways), IH-30, and other major transportation facilities within the Trinity Parkway project area to improve mobility and safety, and thereby increase accessibility to businesses and public facilities. The proposed Trinity Parkway thus addresses localized congestion in and near the Dallas CBD, and thereby alleviates a major traffic bottleneck that affects mobility throughout the DFW region.

## **S-5 ALTERNATIVES CONSIDERED**

**FEIS Chapter 2** describes the alternatives analysis process and the Build Alternatives carried forward in the FEIS for further evaluation. Planning for the Trinity Parkway was developed from TxDOT's *Trinity Parkway Corridor Major Transportation Investment Study* (MTIS) published in March 1998 (TxDOT, 1998a). The *Trinity Parkway Corridor MTIS* focused on transportation needs in the vicinity of the Dallas CBD, and developed a seven-point plan of action as follows:

1. Enhanced work trip reduction measures;
2. Bicycle and pedestrian facilities;
3. Enhanced transportation facility management;
4. Improvements to the Canyon, Mixmaster, and Lower Stemmons Freeway corridors;
5. Extension of Woodall Rodgers Freeway westward across the Dallas Floodway to connect to Singleton Boulevard and Beckley Avenue;
6. A continuous high-occupancy vehicle (HOV) system through the Canyon, Mixmaster, and Lower Stemmons corridors; and
7. A Trinity Parkway reliever route (proposed action).

Building on the MTIS and the NEPA scoping process, the DEIS used the same corridors as the MTIS. The DEIS analyzed six Build Alternatives (Alternatives 2A, 2B, 3A, 3B, 4A, and 5) as well as the No-Build Alternative. The SDEIS republished the DEIS along with evaluating two additional Build Alternatives (Alternatives 3C and 4B) based on agency consultation after the February 2005 publication of the DEIS. Given the above, a total of eight Build Alternatives and the No-Build Alternative were evaluated as part of the SDEIS.

Throughout the EIS process, the iterative process of proposing alternatives and receiving feedback from the USACE, other agencies, and the public has shaped the list of candidate alternatives. In October 2006, the USACE Fort Worth District provided comments on a draft version of a SDEIS provided to the District in July 2006. In the comments, the USACE raised several logistic concerns about the Trinity Parkway, specifically focusing on the Build Alternatives located in the Dallas Floodway. These alternatives, as proposed, appeared to adversely impact operations and maintenance requirements within the Dallas Floodway. The USACE logistic concerns are summarized as follows:

- The project must not interfere with the ability of the USACE or City of Dallas to operate and maintain the Dallas Floodway, conduct flood fighting activities, or restore or improve the flood damage reduction capability of the federal project.
- No cuts, flood separation walls, or retaining walls will be allowed that impact the existing or planned expansion of the Dallas Floodway or Dallas Floodway Extension levees.

The February 2009 SDEIS noted that the USACE considered Alternatives 3A, 3B, and 4A unapprovable due to these logistic issues, and these four alternatives were eliminated from further analysis and consideration. Similarly, the feasibility of realigning or modifying Alternative 5 to address the USACE concerns was evaluated during the development of the LSS. The evaluation involved shifting the mainlanes away from the levees and a limited analysis of potential impacts to provide the FHWA with quantitative data to support a decision regarding the viability of a modified version of Alternative 5. The analysis found that a shift away from the levees would result in a substantial increase in residential displacements in minority and low-income neighborhoods and substantially greater costs associated with right-of-way (ROW) acquisition and relocation assistance. Consequently, the FHWA determined that Alternative 5 could not be practicably modified to avoid adverse impacts to the levees as identified by the USACE.

As a result of the extensive history behind the development of Trinity Parkway design options, four Build Alternatives presented in the SDEIS and further evaluated in the LSS (Alternatives 2A,

2B, 3C, and 4B) were identified as reasonable for meeting the need and purpose of the Trinity Parkway.

**FEIS Chapter 2** also discusses the legislative and regulatory obligations of the FHWA to conduct an analysis as to whether each of the Trinity Parkway Build Alternatives is “practicable.” All four Build Alternatives are expected to have effects on waters of the U.S., including wetlands, and therefore would involve consideration of EO 11990 (Protection of Wetlands). In addition, EO 11988 (Floodplain Management) applies because the alternatives are located either partially (Alternatives 2A and 2B) or primarily (Alternatives 3C and 4B) within the Dallas Floodway. Regulations implementing these EOs require federal agencies, prior to selecting an alternative that would be located wholly or partially within wetlands or floodplains, to first demonstrate that there is no “practicable alternative” to placing any portion of the project within wetlands or floodplains. The analysis in **FEIS Chapter 2** of the practicability of the Build Alternatives, using the comprehensive criteria established by federal regulations implementing the above mentioned EOs, essentially includes the consideration of cost, existing technology, and logistics, in addition to several types of natural and social constraints. The analysis of practicability under EO 11990 (Protection of Wetlands) and EO 11988 (Floodplain Management) concluded that only Alternatives 3C and 4B are practicable and that Alternatives 2A and 2B are not practicable. As both EOs further require that if more than one of the practicable Build Alternatives would result in impacts to wetlands or floodplains, then federal agencies must select the least environmentally damaging of the available practicable alternatives. Accordingly, as compared to Alternative 4B, Alternative 3C is the least environmentally damaging practicable alternative.

The practicability of the alternatives must also be assessed as part of the process for issuing a permit under Section 404 of the Clean Water Act. The analysis of practicability under the criteria issued by the USEPA in its Section 404(b)(1) Guidelines (40 CFR Part 230) focuses individually on the factors of cost, logistics, and technology to determine practicability. Under Section 404 regulations, the USACE makes the determination of practicability when considering a permit application. However, a preliminary analysis of Section 404 practicability has been developed in coordination with the USACE and is included in **FEIS Appendix G-1**, which indicates that Alternatives 2A and 2B are not practicable and that Alternative 3C is practicable on the basis of project cost.

As discussed in **FEIS Section 2.9**, the FHWA recommends Alternative 3C; however, the No-Build Alternative remains under consideration within this FEIS. As discussed in **FEIS Section 2.8**, the FHWA's decision to recommend Alternative 3C for further evaluation is based on a unique set of factors that warrant favoring an alternative with significant and longitudinal encroachments of the



Dallas Floodway, even though general FHWA policy (i.e., 23 CFR Part 650) would not favor such an alternative. These factors relate to the risks of constructing a roadway longitudinally within a floodplain and community support for such roadway. First, the proposed project has been designed to avoid any substantial impacts to the ability of the Dallas Floodway to perform its fundamental mission of safely conveying floodwaters from extreme storm events past the Dallas CBD. Second, Alternative 3C is designed to protect the roadway from any substantial harm from floodwaters passing through the Dallas Floodway. Third, the concept of placing a longitudinal roadway in the Dallas Floodway has been a prominent aspect of City of Dallas planning for over four decades. Accordingly, subsequent to the environmental review of this FEIS and consideration of comments from all sources, the FHWA will select an alternative in the anticipated ROD.

## S-6 ENVIRONMENTAL CONSEQUENCES

**FEIS Chapter 3** describes the existing human, natural, and physical environmental conditions of the Trinity Parkway project area. In general, this chapter describes the project area as it is, as well as how likely it is to be in the future under the No-Build Alternative, and forms the baseline standard against which potential impacts of the Build Alternative may be assessed.

**FEIS Chapter 4** describes the anticipated impacts (beneficial and/or adverse) to existing social, economic, and environmental resources within the project area for the FHWA-recommended Build Alternative and the No-Build Alternative. **Table S-1** summarizes information related to project design and the impact analyses discussed in **FEIS Chapter 4**.

**TABLE S-1. SUMMARY OF ATTRIBUTES AND IMPACTS OF ALTERNATIVES**

Comparison Factors	Unit of Measure	Trinity Parkway Alternatives	
		1 No-Build	3C Floodway
Roadway Characteristics and Costs			
Total Length	Miles	---	8.79
Total Estimated Right-of-Way	Acres	---	559 <sup>18</sup>
Excavation/Borrow Areas	Acres	---	317
ROW and Utility Relocation Cost	2013 \$ Millions	---	146
Construction Cost (includes ITS cost)		---	940
Agency Cost		---	228
Total Cost (sum of 3 cost items above)		---	1,314

**TABLE S-1. SUMMARY OF ATTRIBUTES AND IMPACTS OF ALTERNATIVES**

Comparison Factors	Unit of Measure	Trinity Parkway Alternatives	
		1 No-Build	3C Floodway
Traffic Utilization			
Commonwealth to Hampton/Inwood	Average Daily Traffic (ADT)	---	145,000
Hampton/Inwood to Wycliff/Sylvan		---	121,000
Wycliff/Sylvan to Woodall Rodgers		---	127,000
Woodall Rodgers to Houston/Jefferson		---	104,000
Houston/Jefferson to Corinth		---	99,000
Corinth to MLK		---	122,000
MLK to IH-45		---	128,000
IH-45 to US-175		---	90,000
Measures of Effectiveness (Measured within the Trinity Parkway Project Area: Year 2035) <sup>1</sup>			
Daily VMT <sup>2</sup>	Vehicle Miles Traveled (M)	7,022,833	8,075,699
Daily VHT <sup>3</sup>	Vehicle Hours Traveled	237,528	249,205
Average Speed <sup>4</sup>	mph	30	32
Lane Length <sup>5</sup>	Miles	846	922
Congestion Delay <sup>6</sup>	Vehicle Hours	68,067	63,250
Lane Miles at LOS D, E or F <sup>7</sup>	Percent	47	47
Community Impacts			
Private Land Use Changed to ROW	Acres	---	333
Consistent with Local Plans and Policies (e.g., BVP <sup>8</sup> )	Yes/No	No	Yes <sup>15</sup>
Residential Relocations	Number	---	3
Commercial Displacements	Number	---	27
Community/Public Facility Displacements <sup>9</sup>	Number	---	---
Change in Parks/Recreation Areas <sup>10</sup>	Acres	---	-222
Economic Impacts			
Estimated Total Tax Value Lost from Land Conversion to ROW	\$ Millions	---	54
Estimated Annual Local Tax Revenue Lost from Land Conversion to ROW	\$ Millions		1.4
Estimated Number of Businesses Displaced	Number	---	15 to 20
Estimated Jobs Affected Due to Business Displacements	Number	---	72 to 203
Physical Environment			
Water Quality Impacts	Yes/No	No	Yes
100-Year (Base) Floodplain Impacts	Acres	---	305
Proposed Condition Meets USACE Criteria for Valley Storage (100-Year and SPF)	Yes/No	---	Yes

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Comparison Factors	Unit of Measure	Trinity Parkway Alternatives	
		1 No-Build	3C Floodway
Proposed Condition Meets USACE Criteria Concerning Increase in Flood Elevation (100-Year and SPF) <sup>17</sup>	Yes/No	---	No - 100-Year (max. rise of 0.27 feet) Yes – SPF (max. rise of 0.00 feet) <sup>17</sup>
Proposed Condition Meets USACE Criteria Concerning Erosive Water Velocity	Yes/No	---	Yes
Air Quality - Consistent with the conforming TIP/MTP	Yes/No	No <sup>16</sup>	Yes <sup>16</sup>
Projected CO Concentrations below the NAAQS	Yes/No	Yes	Yes
MSAT – Expected change <sup>12</sup>	Decrease/Increase	Decrease	Decrease
Noise Impacts	Yes/No	---	Yes
Visual Impacts	Low/Med/High	Low	Med
Effects of Hazardous Material Sites <sup>13</sup>	Number	---	24
<b>Natural Environment</b>			
All Waters of the U.S., including Wetlands	Acres	---	-65.6
Forested Wetlands	Acres	---	-1.4
Emergent Wetlands	Acres	---	-50.3
All Open Water Features	Acres	---	-13.9
Riparian Forests	Acres	---	-49.0
Maintained Grassland Areas <sup>14</sup>	Acres	---	-491.9
Threatened/ Endangered Species Impacts	Yes/No	No	No
<b>Cultural Resources</b>			
Archeological Historic Properties	Number	---	---
Non-Archeological Historic Resources <sup>11</sup>	Number	---	1

**TABLE S-1. SUMMARY OF ATTRIBUTES AND IMPACTS OF ALTERNATIVES**

Comparison Factors	Unit of Measure	Trinity Parkway Alternatives	
		1 No-Build	3C Floodway
<b>Notes:</b> <b>M</b> = Millions; <b>ADT</b> = Average Daily Traffic; <b>VMT</b> = vehicle miles traveled; <b>VHT</b> = vehicle hours traveled; <b>LOS</b> = Level of Service; <b>NRHP</b> = National Register of Historic Places; <b>EJ</b> = Environmental Justice; <b>SPF</b> = Standard Project Flood; <b>mph</b> = miles per hour; --- = no impacts anticipated for this alternative. <ol style="list-style-type: none"><li>MOEs focus on the identified project needs and also provide a method to determine the degree that traffic conditions, such as congestion and mobility, could be improved by the Build Alternative.</li><li>Vehicle Miles of Travel (VMT) = the total number of miles driven by all vehicles in the project area on an average day.</li><li>Vehicle Hours of Travel (VHT) = the total time spent driving vehicles in the project area on an average day.</li><li>Average Speed (mph) = VMT divided by the VHT.</li><li>Lane Length (miles) = segment length multiplied by the number of lanes</li><li>Congestion Delay (Vehicle Hours) determines whether vehicles are experiencing delays on the roadways and gauges the degree that congestion could be managed by the Build Alternative.</li><li>Percent Lane Miles at LOS D, E or F = percent of lane miles operating in congested conditions at LOS D, E or F.</li><li>The "BVP" is the City of Dallas Balanced Vision Plan, a master plan for parks and lakes in the Trinity Floodway.</li><li>The number shown is the total number of buildings displaced at these types of facilities, not the number of facilities affected.</li><li>ROW would be required from within the Trinity River Greenbelt Park, and access rights for construction, operation, and maintenance are anticipated to be established by an operating agreement with the City of Dallas. The deed records for the park land indicate that it can be used for transportation.</li><li>The number shown is the total number of NRHP-listed or eligible properties identified within the APE where there would be an adverse effect.</li><li>The USEPA predicts substantial future MSAT reductions as the agency's new light-duty and heavy-duty on-road fuel and vehicle rules come into effect (Tier II, light-duty vehicle standard, Heavy-Duty Diesel Vehicle (HDDV) standards and low sulfur diesel fuel, and the USEPA's proposed Off-Road Diesel Engine and Fuel Standard). These projected air emission reductions will be realized even with the predicted continued growth in vehicle miles traveled.</li><li>Hazardous waste/material sites within or adjacent to proposed ROW.</li><li>The figures for impacts to maintained grass areas for Alternative 3C includes estimated excavation areas of 271 acres.</li><li>Compatibility determined based on whether the alternative is conceptually consistent with the municipal planning document, and not by precise matching of alternative labels (i.e., alternative mentioned in the city plan or a successor or variant alternative).</li><li>Implementation of the No-Build Alternative would require an MTP revision and new conformity determination. In regards to the Build Alternative, the MTP includes a Trinity Parkway reliever route as a key element to the functioning of the plan. The proposed project design concept, scope, and project cost are consistent with the conforming MTP and 2013-2016 TIP.</li><li>Hydraulic modeling results reflect updated model existing conditions and output for Alternative 3C. Any flood estimates for Alternative 3C that do not meet the 1988 ROD criteria would require a variance before a permit under Section 404 or Section 10 could be issued.</li><li>559 acres for Alternative 3C reflects additional ROW needed for the transition with IH-35E and SH-183 that would apply for the Build Alternative at the northern terminus as discussed in <b>FEIS Section 2.6.1</b>.</li></ol>			

As discussed in **FEIS Section 4.28.2**, the significant and longitudinal floodplain encroachments of Trinity Parkway Build Alternatives located in the Dallas Floodway have been the subject of scrutiny since the outset of the project development and NEPA processes. The balancing of risks per FHWA floodplain policies in 23 CFR Part 650 requires the careful consideration of the following five risk factors: (1) the expected effects of the proposed facility on the functioning of the floodplain; (2) the likelihood of flooding; (3) the estimated time to make the road operational again if flooded; (4) damage expected to roadway and ancillary features of the roadway and measures incorporated to minimize or mitigate that damage; and (5) damage expected to occur to the roadway embankment and measures incorporated to minimize or mitigate that damage.

As encroachments are significant, engineering design and planning measures to ensure that floodway road alternatives remain hydraulically neutral have been at the forefront of the interagency coordination throughout the development of alternatives for the Trinity Parkway. The proposed project has been designed to avoid any substantial impacts to the ability of the Dallas Floodway to perform its fundamental mission of safely conveying floodwaters from extreme storm events past the Dallas CBD. The proposed Alternative 3C would be built upon embankments that would elevate the roadway above the 100-year floodplain or protected by a flood separation wall, so the roadway would not be inundated by a flooding event with a one percent risk of occurrence in any given year. In the event Alternative 3C were to be inundated by the rare SPF flood (i.e., the 2,500-year flood with probability of occurrence in any given year of 0.04 percent), it has been estimated that the road would be closed for approximately five days, including two days of inundation and three days of clean-up. Inundation by flood events exceeding the 100-year event in the Dallas Floodway could result in damage to roadway features, and depending on the extent of such damage, may require several days to complete the necessary repairs. Such repair would generally not prevent the roadway from reopening after a flood event because temporary measures (e.g., signage or portable barriers) would be deployed to restore the roadway to operation. Alternative 3C is designed to protect the roadway from any substantial harm from floodwaters passing through the Dallas Floodway.

The combination of the need for a reliever route to manage local traffic congestion, the absence of practicable alternatives outside the floodplain, and the general affirmation of longitudinal encroachment by elected leaders and the community in general are important considerations in FHWA's recommendation of a floodway alternative. In addition, as summarized above, the various risks that attend the proposed construction of a roadway within the Dallas Floodway have been addressed through engineering design, impacts analysis, and interagency planning to an acceptable level.

In addition, FEIS Chapter 4 includes analyses of potential indirect and cumulative impacts, and a brief summary of the results from each analysis is provided below:

**Indirect Impacts:** Based on the indirect impact analysis, Alternative 3C would not challenge the land use change baseline determined for the area of influence (AOI) through the Land Use Sensitivity Assessment. The alternative would not induce land use change because no new access would be introduced. No planned projects associated with the Build Alternative have been identified, and induced development is not anticipated. Alternative 3C would complement existing public policy by providing congestion relief around downtown while allowing existing development trends to continue.

**Cumulative Impacts:** A brief summary of cumulative impacts (direct impacts + indirect impacts + impacts from reasonably foreseeable transportation and development projects) is provided in **Table S-2** below. Implementation of regulatory control strategies and policies are assumed in relation to the proposed project and other reasonably foreseeable projects. Potential cumulative impacts to all resources/issues described below could be avoided or minimized by compliance with applicable local, state, and federal requirements.

**TABLE S-2. SUMMARY OF CUMULATIVE IMPACTS**

<b>Comparison Factors</b>	<b>Impacts</b>
<b>Community Impacts</b>	
Private Land Use Changed to ROW	Net loss of approximately 1,552 acres.
Consistent with Local Plans and Policies (e.g., BVP)	The transportation plans would occur only with approval of municipal and/or federal and state transportation, and would be expected to conform to municipal planning documents.
Residential Relocations	Loss of 91 residences. A variety of institutional safeguards are in place to ensure that members of environmental justice populations who are displaced from their residences have access to affordable housing within or near the same community.
Change in Parks/Recreation Areas	Net loss of approximately 313 acres, but the vast majority of open space areas within the RSA are expected to be preserved in perpetuity because of municipal and federal regulations, plans, and policies.
<b>Physical Environment</b>	
Water Quality Impacts	Future development would increase the amount of impervious surfaces in the corridor and would likely increase storm water runoff. The multiple federal, state, and local controls designed to minimize the impacts of development on water quality would ensure that potential impacts to water quality would be minimized to an acceptable level.
Floodplain Impacts	The cumulative impacts of the Dallas Floodway's ability to handle extreme storm water are expected to be insignificant for Alternative 3C in combination with other foreseeable projects; Alternative 3C has been designed to ensure the continued functioning of the Dallas Floodway for flood conveyance. Likewise, all other plans for the enhancement of natural resources within the Dallas Floodway include detailed design considerations that are expected to improve valley storage capacity, and otherwise enhance the Dallas Floodway.
Air Quality	The proposed improvements are consistent with the MTP and the current TIP. Any increase in ozone precursor emissions are projected to be more than offset by emissions reductions from USEPA's new fuel and vehicle standards.
Visual Impacts	Alternative 3C would have a strong visual impact on the Dallas Floodway. However, other foreseeable projects (e.g., BVP and DFE Projects) would focus on enhancing the visual quality of natural resources in the Dallas Floodway. Consequently, such projects would serve to substantially offset the visual intrusion of Alternative 3C.
<b>Natural Environment</b>	
All Waters of the U.S., including Wetlands	Net loss of approximately 88 acres.
Woodlands	Net gain of approximately 1,006 acres.
Grasslands	Net loss of approximately 1,833 acres. This loss is not likely result in an overall adverse impact to wildlife habitat because grassland areas are predominantly low quality habitat (i.e. mowed, non-native grasses). Also, much of these areas would be replaced by lakes, woodlands, forested wetlands, and emergent wetlands.
<b>Cultural Resources</b>	
Non-Archeological Historic Resources	Cumulative impacts would potentially affect 14 resources. Existing regulatory controls and mitigation requirements are expected to ensure that potential impacts to listed infrastructure (the Dallas Floodway), buildings, bridges, or districts would be minimal. As a result, no substantial impacts would be anticipated.

**FEIS Chapter 5** describes mitigation measures and commitments associated with Build Alternative 3C. Examples include noise barriers and visual screens to minimize increased noise levels and visual intrusion affecting local residents; limiting construction activities to the minimum area needed, or avoiding areas during construction, to reduce impacts to vegetation; and employing erosion/sedimentation control techniques to avoid and/or minimize adverse impacts to wetlands and water bodies. Per 23 U.S.C. Section 139, the Build Alternative has been developed to a higher level of detail in order to facilitate the development of mitigation measures or concurrent compliance with other applicable laws. Final project design and mitigation measures would involve continued coordination between the FHWA/TxDOT/NTTA and other agencies.

**FEIS Chapter 6** describes cost estimates for Build Alternative 3C. The potential sources of funding and cost sharing opportunities to construct the proposed project are discussed. Due to funding constraints and uncertainties associated with implementation of the project by TxDOT using gasoline tax revenue sources, the proposed action is being considered for implementation as a limited-access toll facility with the NTTA as the local sponsor. Subject to completion of NEPA and other agency considerations, implementation of the proposed action as a NTTA toll facility would involve the sale of toll-financed revenue bonds to private investors at competitive rates. Notwithstanding this approach, should other local, state, or federal funding become available at some future date, this funding may be used to support the proposed action.

## **S-7 PUBLIC INVOLVEMENT AND ADDITIONAL INFORMATION**

**FEIS Chapter 8** describes the public involvement and agency coordination that occurred throughout the preparation of the DEIS, SDEIS, and LSS. The preparation of the DEIS, SDEIS, LSS, and this FEIS involved extensive coordination and consultation with the public that may be affected by the proposed project.

Initial public involvement opportunity occurred at the Public Scoping Meeting held on July 8, 1999. Residents, property owners, and elected officials were notified through direct mailings, legal advertisements, and paid advertisements in local newspapers. The purpose of the meeting was to initiate public involvement and identify the range of alternatives, environmental impacts, and important issues to be addressed in the EIS. The meeting included a technical presentation, exhibits, and handouts, after which the attendees were able to present comments concerning scoping issues to be addressed in the EIS. Six comments were received during the meeting and by direct mail, as well as 23 letters.



Meetings of the Community Advisory Work Group (CAWG) also facilitated public involvement. Eleven CAWG meetings were held during the period from 1999 to 2005. The CAWG was composed of members of the community who volunteered their time to stay involved in the project through regular meetings and other activities to provide input, ideas, and concerns to the project team.

Further coordination and consultation with the public included the release of Trinity Parkway DEIS, SDEIS, and LSS documents for public review. Prior to the DEIS, SDEIS, and LSS public hearings, notices were published through direct mailings, advertisements in local newspapers, on the NTTA's website ([www.ntta.org](http://www.ntta.org)), and publicized by news releases distributed to area broadcast media.

The DEIS was released for public review in February 2005, and in March 2005, a public hearing for the Trinity Parkway DEIS was held. Attendance of 159 people was recorded for the public hearing; this number includes one elected official from the City of Dallas and 13 public officials. In addition, project team members representing the FHWA, TxDOT, and NTTA were available to explain the proposed project and answer questions. On April 8, 2005, the public comment period for the DEIS concluded. A total of 91 comments were received at the DEIS public hearing on March 29, 2005, or within the comment period (see **FEIS Appendix K**).

The SDEIS was released for public review in February 2009. In May 2009, a public hearing for the Trinity Parkway SDEIS was held. Attendance of 405 people was recorded for the public hearing; this number includes six elected officials, and 10 media representatives. In addition, project team members representing the FHWA, TxDOT, and NTTA were available to explain the proposed project and answer questions. The extended comment period began in May and continued through June 30, 2009. A total of 347 comments were received at the SDEIS public hearing on May 5, 2009, or within the comment period. Statements, comments and responses associated with the SDEIS public hearing can be found in **FEIS Appendix L**.

The LSS to the SDEIS was released for public review in March 2012. In May 2012, a public hearing for the Trinity Parkway LSS was held. Attendance of 288 people was recorded for the public hearing; this number includes 10 elected officials and 12 media representatives. In addition, project team members representing the FHWA, TxDOT, and NTTA were available to explain the proposed project and answer questions. The public comment period for the LSS ended on May 18, 2012. A total of 205 comments were received at the LSS public hearing on May 8, 2012, or within the comment period. Statements, comments and responses associated with the LSS public hearing can be found in **FEIS Appendix M**.

In addition to the Public Scoping Meeting, CAWG meetings, DEIS, SDEIS, and LSS public hearings, numerous agency coordination meetings and briefings were held during the period from 1999 to 2008. **FEIS Appendix A-3** summarizes these public participation and agency events.

[END OF SUMMARY]